

REMARKS

This is a full and timely response to the final Office Action of September 14, 2005. Reexamination, reconsideration, and allowance of the application and all presently pending claims are respectfully requested.

Upon entry of this Fourth Response, claims 1-12, 14-18, 21, 22, 26-28, 30, 32, 33, 35-39, 44, 47-49, 51-54, 56, and 57 are pending in this application, and claims 44 and 54 have been allowed. Claims 1-5, 9-12, 16-18, 21, 22, 27, 28, 30, 32, 33, 35-39, 44, 47, 51, and 53 are directly amended herein, and claims 13, 19, 20, 23-25, 29, 31, 40, 46, 50, and 55 are cancelled without prejudice or disclaimer via the amendments set forth herein. Further, claims 56 and 57 are newly added. It is believed that the foregoing amendments add no new matter to the present application.

Response to §102 and §103 Rejections

A proper rejection of a claim under 35 U.S.C. §102 requires that a single prior art reference disclose each element of the claim. See, *e.g.*, *W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 U.S.P.Q. 303, 313 (Fed. Cir. 1983).

Claim 1

Claim 1 presently stands rejected under 35 U.S.C. §102 as allegedly being anticipated by *Edanami* (U.S. Patent No. 6,297,846). Claim 1 reads as follows:

1. A system for automatically cropping graphical images, comprising:
memory for storing digital data that defines a graphical image captured by said system;
an object detector configured to perform a search of said digital data for an object of a particular type; and
an image cropper configured to automatically identify, based on said search, at least one object of said particular type within said graphical image as an object of interest based on a position of said at least one object within said graphical image but not based on any other graphical image captured by said system, said image cropper further configured to automatically perform a cropping operation on said graphical image such that said at least one object identified as an object of interest is moved closer to a center of said graphical image. (Emphasis added).

Applicant respectfully asserts that *Edanami* fails to disclose at least the features of claim 1 highlighted above. Therefore, *Edanami* is inadequate to reject claim 1 under 35 U.S.C. §102.

In this regard, *Edanami* appears to disclose a videoconference system that analyzes graphical images and identifies a participant within at least one of the images as a “speaker” based on parameters indicative of the participant’s motion. See column 19, lines 13-24. However, there is nothing in *Edanami* to indicate that any object is “automatically” identified as “an object of interest,” as recited by claim 1, “based on a position of said at least one object within said graphical image but not based on any other graphical image captured by said system.”

For at least the foregoing reasons, Applicant asserts that *Edanami* fails to disclose each feature of pending claim 1. Thus, the rejection of claim 1 under 35 U.S.C. §102 should be withdrawn.

Claims 2-4, 6-8, and 56

Claims 2-4, 7 and 8 presently stand rejected in the Office Action under 35 U.S.C. §102 as allegedly being anticipated by *Edanami*. Further, claim 6 presently stands rejected under 35 U.S.C. §103 as allegedly being unpatentable over *Edanami* in view of *Parulski* (U.S. Patent No. 6,650,366). In addition, claim 56 has been newly added via the amendments set forth herein. Applicant submits that the pending dependent claims 2-4, 6-8, and 56 contain all features of their respective independent claim 1. Since claim 1 should be allowed, as argued hereinabove, pending dependent claims 2-4, 6-8, and 56 should be allowed as a matter of law for at least this reason. *In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

Claim 5

Claim 5 presently stands rejected under 35 U.S.C. §102 as allegedly being anticipated by *Edanami*. Claim 5 reads as follows:

5. A system for automatically cropping graphical images, comprising:
memory for storing digital data that defines a graphical image;
an object detector configured to analyze said digital data and to automatically identify a graphical object within said graphical image; and
an image cropper configured to make a determination as to whether said graphical object is close to an edge of said graphical image and to automatically identify, based on said determination, said graphical object as an object to be removed from said graphical image and to automatically crop said digital data based on said determination such that said graphical object is removed from said graphical image. (Emphasis added).

Applicant respectfully asserts that *Edanami* fails to disclose at least the features of claim 5 highlighted above. Therefore, *Edanami* is inadequate to reject claim 5 under 35 U.S.C. §102.

In this regard, *Edanami* appears to disclose a videoconference system that analyzes graphical images and removes participants in a videoconference from a graphical image. See Figures 19(A)-19(E). However, there is nothing in *Edanami* to indicate that the system

“automatically identifies” a participant as an “object to be removed” based on a determination that the participant is close to an edge of the graphical image. Thus, Applicant asserts that *Edanami* fails to disclose at least “an image cropper configured to make a determination as to whether said graphical object is close to an edge of said graphical image and to automatically identify, based on said determination, said graphical object as an object to be removed from said graphical image,” as recited by claim 5.

For at least the foregoing reasons, Applicant submits that *Edanami* fails to disclose each feature of amended claim 5. Accordingly, the 35 U.S.C. §102 rejection of claim 5 is improper and should be withdrawn.

Claim 9

Claim 9 presently stands rejected under 35 U.S.C. §102 as allegedly being anticipated by *Edanami*. Claim 9 reads as follows:

9. A system for automatically cropping graphical images, comprising:
means for capturing graphical images;
memory for storing digital data that defines a graphical image captured by said capturing means;
means searching said digital data for an object of a particular type; and
means for automatically cropping said graphical image, ***said cropping means configured to automatically identify, based on said searching means, at least one object of said particular type within said graphical image as an object of interest based on a position of said at least one object image within said graphical image but not based on any other graphical image captured by said capturing means***, said cropping means configured to crop said graphical image such that said at least one object identified as an object of interest is moved closer to a center of said graphical image. (Emphasis added).

For at least the reasons set forth above in the arguments for allowance of claim 1, Applicant submits that *Edanami* fails to disclose at least the features of claim 9 highlighted hereinabove. Thus, the 35 U.S.C. §102 rejection of claim 9 should be withdrawn.

Claims 10-12, 14, and 15

Claims 10-12 and 15 presently stand rejected in the Office Action under 35 U.S.C. §102 as allegedly being anticipated by *Edanami*. In addition, claim 13 presently stands rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over *Edanami* in view of *Riley* (U.S. Patent No. 6,009,197), and claim 14 presently stands rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over *Edanami* in view of *Parulski*. Applicant submits that the pending dependent claims 10-12, 14, and 15 contain all features of their respective independent claim 9. Since claim 9 should be allowed, as argued hereinabove, pending dependent claims 10-12, 14, and 15 should be allowed as a matter of law for at least this reason. *In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

Claim 16

Claim 16 presently stands rejected under 35 U.S.C. §102 as allegedly being anticipated by *Edanami*. Claim 16 reads as follows:

16. A method for automatically cropping graphical images, comprising:
capturing a graphical image;
storing digital data that defines said graphical image;
automatically searching said digital data for an object of a particular type;
automatically identifying, based on said searching, at least one object of said particular type as an object of interest based on a position of said at least one object within said graphical image but not based on any captured image other than said graphical image; and
automatically cropping said graphical image based on said identifying such that said at least one object identified as an object of interest is substantially centered between at least two edges of said graphical image. (Emphasis added).

For at least the reasons set forth above in the arguments for allowance of claim 1, Applicant submits that *Edanami* fails to disclose at least the features of claim 16 highlighted hereinabove. Thus, the 35 U.S.C. §102 rejection of claim 16 should be withdrawn.

Claims 17, 18, 21, 22, 27, 28, and 57

Claims 17, 18, and 28 apparently stand rejected in the Office Action under 35 U.S.C. §102 as allegedly being anticipated by *Edanami*. Further, claim 21 presently stands rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over *Edanami*. In addition, claims 22 and 27 presently stand rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over *Edanami* in view of *Parulski*, and claim 57 is newly added via the amendments set forth herein. Applicant submits that the pending dependent claims 17, 18, 21, 22, 27, 28, and 57 contain all features of their respective independent claim 16. Since claim 16 should be allowed, as argued hereinabove, pending dependent claims 17, 18, 19, 21, 22, 27, 28, and 57 should be allowed as a matter of law for at least this reason. *In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

Claims 26

Claim 26 presently stands rejected in the Office Action under 35 U.S.C. §102 as allegedly being anticipated by *Edanami*. Applicant submits that the pending dependent claim 26 contains all features of its independent claim 5. Since claim 5 should be allowed, as argued hereinabove, pending dependent claim 26 should be allowed as a matter of law for at least this reason. *In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

Claim 30

Claim 30 presently stands rejected in the Office Action under 35 U.S.C. §102 as allegedly being anticipated by *Edanami*. Claim 30 presently reads as follows:

30. A system for automatically cropping graphical images, comprising:
an image capturing device configured to capture graphical images;
memory for storing digital data that defines a graphical image captured by said image capturing device;
an object detector configured to automatically detect a face within said graphical image; and

an image cropper configured to make a determination as to whether said face is within a particular region of said graphical image and to automatically identify said face as an object of interest based on said determination if said face is within said particular region, said image cropper further configured to automatically perform a cropping operation on said graphical image such that said face is moved closer to a center of said graphical image if said face is determined to be an object of interest, wherein said cropping operation is not based on any image captured by said image capturing device other than said graphical image. (Emphasis added).

Applicant respectfully asserts that *Edanami* fails to disclose at least the features of claim 30 highlighted above. Therefore, *Edanami* is inadequate to reject claim 30 under 35 U.S.C. §102.

In this regard, *Edanami* appears to disclose a videoconference system that captures images via a video camera. A control system analyzes captured images and automatically identifies a participant within the images as a “speaker.” The control system then automatically performs a cropping operation on an image such that the speaker is moved closer to a center of the image. See Figures 18 and 19. However, a participant is apparently “automatically” identified as a “speaker” based on parameters indicative of the participant’s motion (see column 19, lines 13-24) and, in particular, not based on a determination as to whether the participant’s face is “within a particular region of (a) graphical image... wherein said cropping operation is not based on any (other) image captured” by the video camera. Accordingly, *Edanami* fails to disclose “an image cropper configured to make a ***determination as to whether said face is within a particular region of said graphical image*** and to automatically identify said face as an

object of interest *based on said determination if said face is within said particular region... wherein said cropping operation is not based on any image captured by said image capturing device other than said graphical image,*” as recited by claim 30. (Emphasis added).

For at least the foregoing reasons, Applicant asserts that *Edanami* fails to disclose each feature of pending claim 30. Thus, the rejection of claim 30 under 35 U.S.C. §102 should be withdrawn.

Claim 32

Claim 32 presently stands rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over *Edanami* in view of *Riley*. Applicant submits that the pending dependent claim 32 contains all features of its independent claim 30. Since claim 30 should be allowed, as argued hereinabove, pending dependent claim 32 should be allowed as a matter of law for at least this reason. *In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

Claim 33

Claim 33 presently stands rejected in the Office Action under 35 U.S.C. §102 as allegedly being anticipated by *Edanami*. Claim 33 presently reads as follows:

33. A method for automatically cropping graphical images, comprising:
storing digital data that defines a graphical image;
detecting a plurality of faces within said graphical image;
determining an extent that at least one of said faces is from a center region of said graphical image;
automatically identifying, based on said determining, said at least one face as an object of interest if said at least one face is within or close to said center region; and
automatically cropping said graphical image based on said identifying such that said at least one face is substantially centered within said graphical image. (Emphasis added).

Applicant respectfully asserts that *Edanami* fails to disclose at least the features of claim 33 highlighted above. Therefore, *Edanami* is inadequate to reject claim 33 under 35 U.S.C. §102.

In this regard, *Edanami* appears to disclose a videoconference system that analyzes graphical images and identifies a participant within at least one of the images as a “speaker” based on parameters indicative of the participant’s motion. See column 19, lines 13-24. However, there is nothing in *Edanami* to indicate that such a participant is identified as a “speaker” based on a determination of an extent that the participant’s face is from a center region of a graphical image. Accordingly, *Edanami* fails to disclose at least “determining an extent that at least one of said faces is from a center of said graphical image” and ***“automatically identifying, based on said determining, said at least one face as an object of interest if said at least one face is within or close to said center region,”*** as recited by claim 33. (Emphasis added.)

For at least the foregoing reasons, Applicant submits that *Edanami* fails to disclose each feature of amended claim 33. Accordingly, the 35 U.S.C. §102 rejection of claim 33 is improper and should be withdrawn.

Claim 35

Claim 35 presently stands rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over *Edanami* in view of *Parulski*. Applicant submits that the pending dependent claim 35 contains all features of its independent claim 33. Since claim 33 should be allowed, as argued hereinabove, pending dependent claim 35 should be allowed as a matter of law for at least this reason. *In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

Claim 36

Claim 36 presently stands rejected in the Office Action under 35 U.S.C. §102 as allegedly being anticipated by *Edanami*. Claim 36 presently reads as follows:

36. A method for cropping a graphical image, comprising:
detecting a plurality of faces in the graphical image;
determining if at least one of the faces is close to a center of the graphical image;
automatically selecting one of the faces to remain in the graphical image and one of the faces for removal from the graphical image based on the determining; and
automatically cropping the graphical image based on said selecting such that the face selected for removal is removed from the graphical image.
(Emphasis added).

Applicant respectfully asserts that *Edanami* fails to disclose at least the features of claim 36 highlighted above. Therefore, *Edanami* is inadequate to reject claim 36 under 35 U.S.C. §102.

In this regard, *Edanami* appears to describe a system that clips a graphical image containing a plurality of participants, as shown by Figure 19(B), such that the graphical image contains only a single participant, as shown by Figures 19(c)-19(E). However, there is nothing in *Edanami* to indicate that any participant is selected to remain in a graphical image and another participant is selected for removal from the graphical image based on whether any of the faces is close to a center of the graphical image. Accordingly, *Edanami* fails to disclose at least “determining if at least one of the faces is close to a center of the graphical image” and “automatically selecting one of the faces to remain in the graphical image and one of the faces for removal from the graphical image based on the determining,” as recited by claim 36.

For at least the foregoing reasons, Applicant submits that *Edanami* fails to disclose each feature of amended claim 36. Accordingly, the 35 U.S.C. §102 rejection of claim 36 is improper and should be withdrawn.

Claims 37-39

Claims 37-39 presently stand rejected in the Office Action under 35 U.S.C. §102 as allegedly being anticipated by *Edanami*. Applicant submits that the pending dependent claims 37-39 contain all features of their respective independent claim 36. Since claim 36 should be allowed, as argued hereinabove, pending dependent claims 37-39 should be allowed as a matter of law for at least this reason. *In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

Claim 47

Claim 47 presently stands rejected under 35 U.S.C. §102 as allegedly being anticipated by *Edanami*. Claim 47 reads as follows:

47. A system for automatically cropping graphical images, comprising:
memory for storing digital data that defines a graphical image;
an object detector configured to detect a plurality of objects of a particular type within said graphical image; and
an image cropper configured to make a determination as to whether at least one of said objects is close to a center of said graphical image and to automatically identify, based on said determination, said at least one object as an object of interest if said at least one object is located close to said center, said image cropper further configured to crop said graphical image such that said at least one object is substantially centered within said graphical image. (Emphasis added).

For at least the reasons set forth above in the arguments for allowance of claim 33, Applicant submits that *Edanami* fails to disclose at least the features of claim 47 highlighted hereinabove. Thus, the 35 U.S.C. §102 rejection of claim 47 should be withdrawn.

Claims 48 and 49

Claims 48 and 49 presently stand rejected in the Office Action under 35 U.S.C. §102 as allegedly being anticipated by *Edanami*. Applicant submits that the pending dependent claims 48 and 49 contain all features of their respective independent claim 47. Since claim 47 should be allowed, as argued hereinabove, pending dependent claims 48 and 49 should be allowed as a matter of law for at least this reason. *In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

Claim 51

Claim 51 presently stands rejected under 35 U.S.C. §102 as allegedly being anticipated by *Edanami*. Claim 51 presently reads as follows:

51. A method for automatically cropping graphical images, comprising:
detecting an object within said graphical image;
determining whether said object is close to an edge of said graphical image;
selecting said object for removal from said graphical image based on said determining if said determining indicates that said object is close to said edge; and
automatically removing said object from said graphical image based on said selecting. (Emphasis added).

Applicant respectfully asserts that *Edanami* fails to disclose at least the features of claim 51 highlighted above. Therefore, *Edanami* is inadequate to reject claim 51 under 35 U.S.C. §102.

In this regard, in rejecting claim 51, it is alleged in the Office Action that *Edanami* discloses cutting a portrait picture out of a source picture at column 18, lines 22-24. However, there is nothing in *Edanami* to indicate that any object is selected for removal via the alleged “cutting” based on whether the object is close to an edge of the graphical image. Accordingly, *Edanami* fails to disclose at least “determining whether said object is close to an edge of said graphical image” and “selecting said object for removal from said graphical image based on said

determining if said determining indicates that said object is close to said edge,” as recited by claim 51.

For at least the foregoing reasons, Applicant submits that *Edanami* fails to disclose each feature of amended claim 51. Accordingly, the 35 U.S.C. §102 rejection of claim 51 is improper and should be withdrawn.

Claims 52 and 53

Claim 52 presently stands rejected under 35 U.S.C. §103 as allegedly being unpatentable over *Edanami* in view of *Riley*. Further, claim 53 presently stands rejected under 35 U.S.C. §103 as allegedly being unpatentable over *Edanami* in view of *Parulski*. Applicant submits that the pending dependent claims 52 and 53 contain all features of their respective independent claim 51. Since claim 51 should be allowed, as argued hereinabove, pending dependent claims 52 and 53 should be allowed as a matter of law for at least this reason. *In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

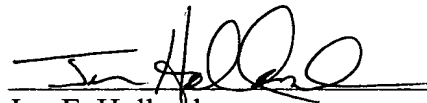
CONCLUSION

Applicant respectfully requests that all outstanding objections and rejections be withdrawn and that this application and all presently pending claims be allowed to issue. If the Examiner has any questions or comments regarding Applicant's response, the Examiner is encouraged to telephone Applicant's undersigned counsel.

Respectfully submitted,

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